CLAIMS

1. A method of generating a staggered dither cell for an image to be printed, said method comprising the steps of:
writing color component values corresponding to even pixels in first entry locations in said dither cell;
writing color component values corresponding to odd pixels in second entry locations in said dither cell; and
mapping said dither cell to a staggered dither cell such that lines of said even pixel values are staggered relative to lines of said odd pixel values.

2. The method of claim 1 wherein said writing step further includes writing said color component values in said first and second entry locations in a correct order for printing by a printhead.

3. The method of claim 1 wherein said writing step further includes writing a number of color component values in one entry location, said number being determined by loading criteria of a printhead.

4. The method of claim 1 wherein said writing steps further comprise writing twelve color component values in each of said first and second entry locations.

5. A staggered dither cell for storing color component values of an image to be printed, said dither cell comprising:
an n x n entry cell where n divides evenly into the number of dots printable by each segment of a printhead;
more than one color component value stored in each entry location of said cell; and
lines of said values corresponding to odd pixels of said image in said cell staggered relative to lines of said values corresponding to even pixels of said image.

6. The staggered dither cell of claim 5 wherein n=50.

7. The staggered dither cell of claim 5 wherein twelve of said color component values are stored in each entry location.

8. The dither cell of claim 7 wherein said twelve color components consist of three colors to be printed for four segments of a printhead.

9. A method of converting an image into a dithered, bi-level image for printing, comprising the steps of:

storing an up-interpolated version of said image in a first buffer;

storing color component values corresponding to odd and even pixels in a dither cell;

staggering lines of said color component values corresponding to odd pixels relative to lines of even pixel values;

comparing each pixel value in said first buffer with its corresponding value in said staggered dither cell; and

outputting an instruction to print to a second buffer if said value from said first buffer is greater than or equal to said staggered dither cell value.

10. The method of claim 9 wherein said storing of said up-interpolated image and said storing of said color component values are controlled by means of an address generator.